



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
 Address: COMMISSIONER FOR PATENTS  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,447	04/14/2004	Steve Karaga	051110-1010	6607

24504 7590 09/12/2005

THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP  
 100 GALLERIA PARKWAY, NW  
 STE 1750  
 ATLANTA, GA 30339-5948

EXAMINER
----------

SHARP, JEFFREY ANDREW

ART UNIT	PAPER NUMBER
----------	--------------

3677

DATE MAILED: 09/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

*Mc*

## Office Action Summary

Application No.

10/824,447

Applicant(s)

KARAGA ET AL.

Examiner

Jeffrey Sharp

Art Unit

3677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 and 21-30 is/are pending in the application.
- 4a) Of the above claim(s) 27-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 and 21-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

[1] This action is responsive to Applicant's remarks/amendment filed on 5 July 2005 with regard to the Official Office action mailed on 31 March 2005.

#### ***Status of Claims***

[2] Claims 1-18 and 21-26 are pending.

#### ***Specification***

[3] The disclosure was previously objected to for informalities. Applicant has successfully addressed these issues in the amendment filed on 5 July 2005. Accordingly, the objections to the specification have been withdrawn.

#### ***Claim Objections***

[4] Claims 4, 5, and 22 were previously objected to because of informalities. Applicant has successfully addressed these issues in the amendment filed on 5 July 2005. Accordingly, the objections to the claims have been withdrawn.

As amended, claim 4 is objected to because "wherein a screw" should be --wherein the screw--.

Claims 1, 7, and 17 are currently objected to for using the phraseology "nail-gun-like device". The word "-like" (i.e., "or the like") renders the claims indefinite because the claims include elements not actually disclosed (those encompassed by "or the like"), thereby rendering

Art Unit: 3677

the scope of the claims unascertainable. See MPEP § 2173.05(d). The word --nail gun-- would convey an ascertainable scope to those of ordinary skill in the art.

Claim 25 is currently objected to for having insufficient antecedent basis for "the nail gun" (line 2), as independent claim 17 requires a "nail-gun-like device".

Claims 1, 5, 8, 10, and 17 are currently objected to for having insufficient antecedent basis for "the thread", "the mid-section", and "the beginning". It is not clear if Applicant is referring to "the thread section" or "threads" or a particular element of either. Furthermore, it is not clearly established in the claim where "the beginning" and "the mid-section" of the thread is (towards the head or tip?). Suggested language might be --...a thread section being coupled to the point section, the thread section having threads of continuous outer diameter along the thread section, said threads having a beginning thread adjacent said point section...--

Claims 3, 15, and 24 are currently objected to because the word "unthread" should be --unthreaded--.

Claims 1 and 10 are currently objected to for having insufficient antecedent basis for "the base".

Claims 1 and 10 are currently objected to for appearing to introduce new matter with the limitation "the beginning of the thread are abutted at the base of the point section". The drawings in the disclosure fail to show a thread portion "abutting" (that is, to say, "coming in contact with") a base of the four-sided pyramidal point. The burden is on Applicant to show support for this limitation in the originally filed specification if this interpretation of "base" is to be used. Moreover, this limitation seems indefinite, because it is not clear if Applicant intends "the four-sided pyramidal point having a four-sided base that forms an intersection between the

Art Unit: 3677

thread section and the point section; wherein the threads of said thread section abut said intersection". This interpretation shows no support in the specification. For the purposes of prosecution, the limitation "the base of the point section" will be broadly construed as any portion of the broadly claimed "point *section*".

***Claim Rejections - 35 USC § 112***

[5] The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

[6] Claims 3, 15, and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The drawings do not provide enablement for an "unthread(ed) section" that is connected to the "point section". It appears Applicant intends --the unthreaded section being coupled to the head section and the thread section-- or --the unthreaded section being coupled to the frustoconical head and the head section--. Although the "unthread section" is "connected" by virtue to all parts of the screw, this language may be confusingly interpreted as having a non-threaded section between the point and thread, which would contradict the limitation "the beginning of the thread being abutted at the base of the point section".

***Claim Rejections - 35 USC § 103***

[1] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3677

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

[6] Claims 1-18 and 21-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rockenfeller US-4,572,720 in view of Takasaki et al. US-6,302,631 and Gabriel et al. US-5,149,237.

In short, Rockenfeller substantially teaches a screw to be driven by a hammer or pneumatic nail gun (col 2 lns 9-15), comprising: a tapered frustoconical head (3) having release engagement means (3') and at least one reinforcement 'nib' (4) underneath the head, an unthread section (8) between the head and a thread section (7), and a point section comprising a pyramidal point (11). Refer to Figure 7, col 2 lines 37-42, col 3 lns 53-56, and col 3 lns 64-68. It is obvious to those of ordinary skill in the art, that if screws are intended to be used in a nail gun, the screws would be collated as taught by the old and well known.

However, Rockenfeller fails to disclose expressly, four nibs spaced 90° apart. Rockenfeller is also silent as to a phosphate coating, and silent as to specific pitch dimensions.

Takasaki et al. as well as the old and well known, teach four nibs (4) spaced 90° under the head to act as drill edges so as to not form cracks in the substrate. These nibs also inherently provide additional strength and structure to the head. See also, US-6,698,987 to Dicke, US-6,394,725 to Dicke, and US-4,655,661 to Brandt, which also teach four nibs spaced 90° under the head.

Gabriel et al. teach advantageous phosphate coatings on collated fasteners to prevent corrosion, and also discloses additional coatings that may decrease penetration force, while

Art Unit: 3677

increasing withdrawal force (col 2 lns 28-32). The fasteners taught by Gabriel et al. are intended for use in a nail driver tool ("or the like"), and may be collated (as shown in figures 3 and 4).

Note that it is already known in the art to apply such coatings to any fastener including screws, nails, and screw-nails as evidenced by Godstead et al. US-2001/001080 A1 claims 10-14.

At the time of invention, it would have been obvious to one of ordinary skill in the art, to modify the nib (4) on the fastener taught by Rockenfeller, to comprise four nibs under the head as suggested by Takasaki et al., in order to decrease splintering of the wood, enable a better biting gripping surface, provide a means for anti-rotation, or to better strengthen and reinforce the head to be suited for hammer blows.

At the time of invention, it would have been further obvious to one of ordinary skill in the art, to add a phosphate and/or other '*drive catalyst*' to the fastener taught by Rockenfeller, as suggested by Gabriel et al., in order to prevent corrosion, decrease penetration resistance, and increase resistance to withdrawal.

As for the size limitations of Claims 1, 5, 9, 11, 13, 17, and 22, it would have been obvious to one of ordinary skill in the art, to modify the dimensions of the fastener taught by Rockenfeller to perform ideally, because those of ordinary skill in the art would appreciate that a modification such as a mere change in size of a component would be obvious. A change in size is generally recognized as being within the level of ordinary skill in the art as a matter of design choice. *In re Rose*, 105 USPQ 237 (CCPA 1955). See also, MPEP § 2144.04 which states: *In re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976) ("mere scaling up of a prior art process capable of being scaled up, if such were the case, would not establish patentability in a claim to an old process so scaled." 531 F.2d at 1053, 189 USPQ at 148.). In *Gardner v. TEC Systems*,

Art Unit: 3677

*Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device. See, for example, US-5,927,035 to Haytayan col. 3 lns 27-30 which makes obvious, a tip angle of 35-37°, and a long pitch (herein, a design choice of 60-63°).

Furthermore, the abundant prior art of record suggests designing a screw intended for impact driving with "acute" flank angles and pitches which "may be such as to allow the spike or nail to be driven into the wood with a hammer...without breaking or forcing the [thread] from its groove" as a matter of design choice. The input variables of *pitch* and *flank angle* have already been shown to provide expected results (that is, a decreased penetration force and ability to not crack the substrate or deform the threads). The examiner takes the position that the below cited references (not used in a formal rejection), make obvious the old and well-known design of flank angles and pitch of screws so that they are suitable for insertion into a substrate via hammer blow.

**Godfrey US-86,832** teaches that it is obvious to drive a screw using hammering means. The screw comprises a conical point, tapered head, unthread section, and thread section.



Art Unit: 3677

Screws, to be turned in by a rotating tool, cannot be applied with sufficient quickness...

Now, to obviate all of these difficulties, and at the same time to secure or retain the advantages derived from using screw-threaded fastenings, which may be driven by percussion, and which will turn as driven, (that is to say, to so make a screw-threaded blow-driven metal sole-fastener, that it cannot turn or be turned after being driven...

It is in this tapering point and plain-formed head, in combination with a shank having a screw-thread, so cut or formed as to enable the fastening to be driven by percusslon, and to cause it to turn as it is driven, that my invention consists.



Godfrey US-86,832

Jones US-313,078 teaches points having a cone shape and four-sided pyramid shape (pg 1 lns 89-91) in combination with threads and heads of any type (pg 1 lns 50-51).

Sloan US-276,541 teaches a cone tip (a), head (B), unthread section (A, lns 15-24), thread section (c) having a pitch within an obvious reach of 60-63° (lns 57-62).

Dunn et al. US-83,699 teaches that it would be obvious to modify the threads (A) of a thread section as a matter of design choice.

Art Unit: 3677

The rib or feather may be of any desired form, but its sides should form an acute angle...

The pitch or spiral, as before stated, may be such as to allow the spike or nail to be driven into the wood with a hammer, or be forced in by a longitudinal motion, without breaking or forcing the rib or feather from its groove.

These spikes and nails are not intended for being turned into the wood by any tool or device, but only to be driven by the hammer or sledge.

Dunn et al. US-83,699

Huang US-2004/0042875 states "Nail guns are used to inject screws" (paragraph 0002).

Jones US-355,825 teaches a cone-shaped or diamond-shaped point (i, pg 1 lns 73-75) in combination with a thread section (e), tapered head (g), unthread section (f), and engagable unscrew means (h). Jones uses a lesser pitch that would be within a non-obvious reach of 60-63°; however, still intends the screw to be driven via hammer blow, and released by unscrewing (pg 1 lns 85-89).

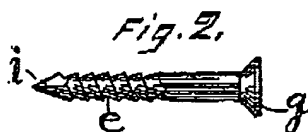


Fig. 3.



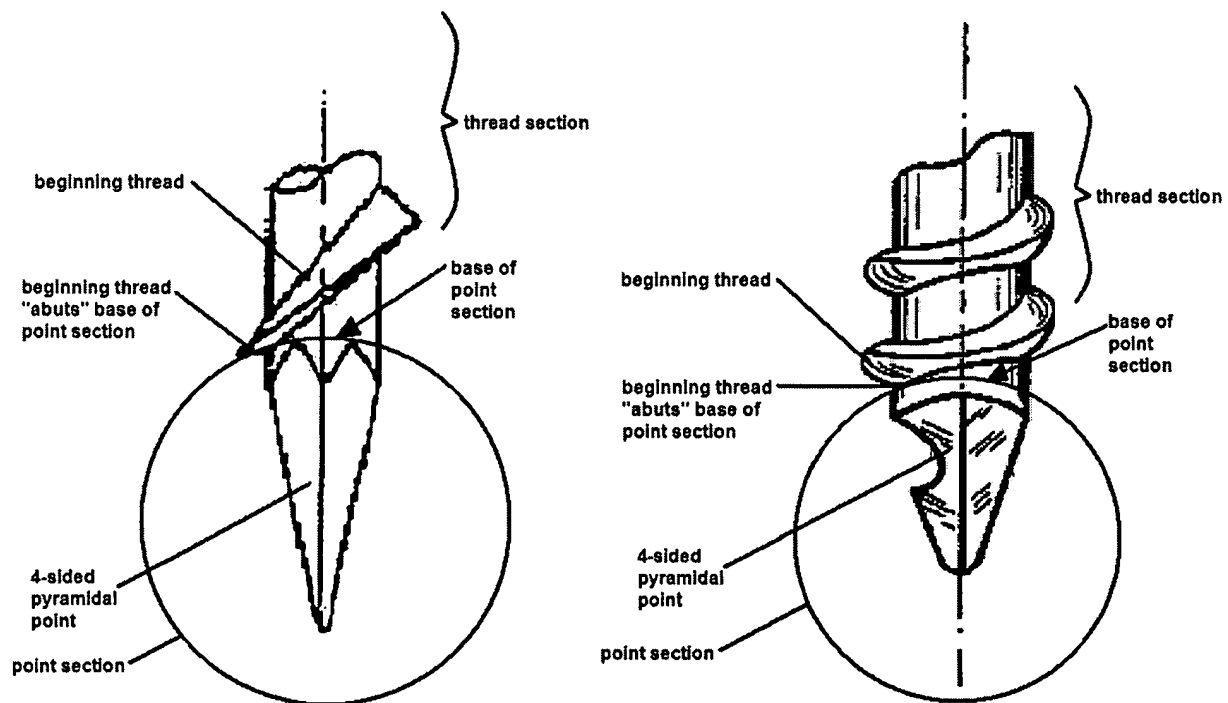
Jones US-355,825

*Response to Arguments/Remarks*

[7] Claim(s) 1-26 were previously rejected under 35 U.S.C. 103(a) as being obvious over the Rockefeller US-4,572,720, Takasaki et al. US-6,302,631, and Gabriel et al. US-5,149,237 references.

Applicant's arguments/remarks with regard to this reference have been fully considered, but are not persuasive. Therefore this rejection is maintained. Supplemental new grounds of rejection in view of Applicant's amendment to the claims are made below.

Applicant has amended the foregoing claim(s) such that (as it is understood), the point section has a point and a base. Rockefeller still suggests (as does Applicant) "threads of a thread section abutting a base of the point section". This is clearly demonstrated in the figure below.

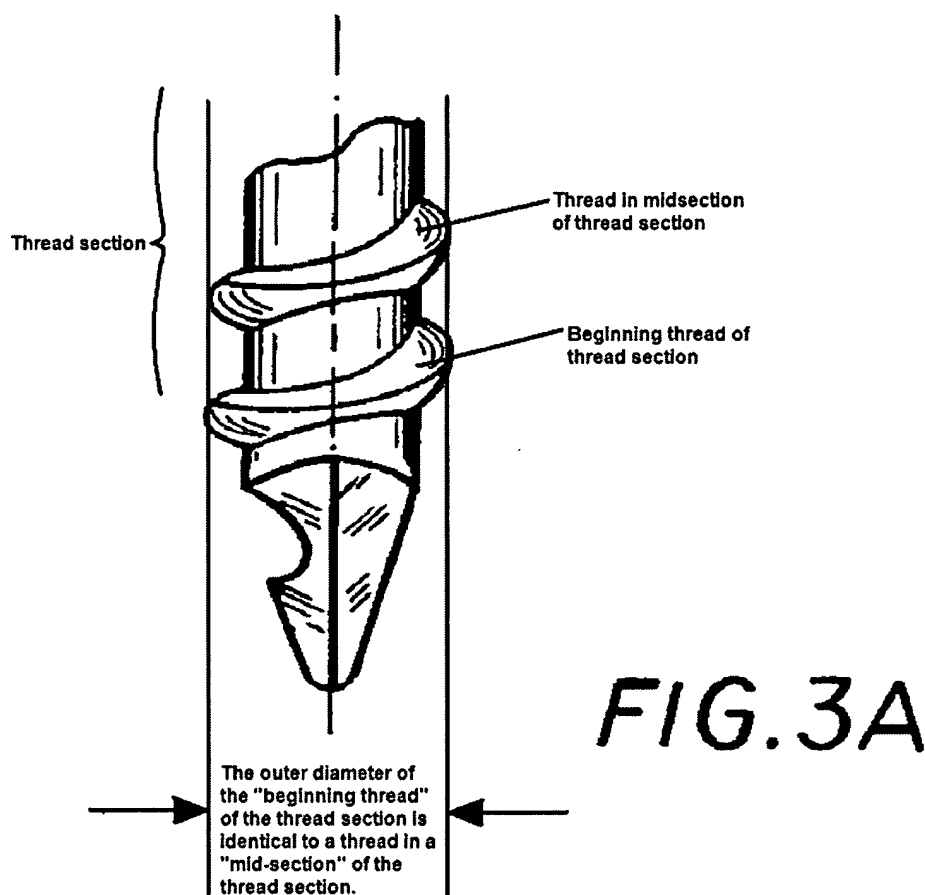


Present invention (left) Rockefeller US-4,572,720 (right)

Art Unit: 3677

Regarding Applicant's remarks concerning "the Examiner seemed to indicate that the presently pending claims are in favorable condition for allowance", this statement was not made. The examiner merely suggested some helpful language in an attempt to clarify the limitation "fully formed". Attention should be drawn to PTOL-413, which summarizes the interview made with Applicant on 19 May 2005. Box (g) has been checked, which acknowledges that no agreement was reached as to the "favorable condition of the claims for allowance".

Regarding Applicant's remarks concerning the added limitation "the beginning of the thread having the same outer diameter as the thread in the mid-section of the thread section" is not shown by Rockenfeller '720, attention should be drawn to Figure 3A of Rockenfeller '720. Rockenfeller clearly shows a "beginning thread" most adjacent the point section having the same outer diameter as the rest of the threads of the thread section. It is to be noted that Rockenfeller dimension "d1" refers to the "root diameter" of the threads, and "d2" indicates the "outer diameter" of the threads. Nowhere does Rockenfeller suggest a *different* outer diameter for the leading (i.e., "beginning") thread.



Rockenfeller US-4,572,720

Applicant's remarks concerning the commercial success of the present invention have been fully considered and are acknowledged. It is to be noted, however, that evidence of commercial success, etc. must be commensurate in scope with the scope of the claims: *In re Tiffin*, 448 F.2d 791, 171 USPQ 294 (1971). Further, in considering evidence of commercial success, care should be taken to determine that the commercial success alleged is directly derived from the invention claimed, in a marketplace where the consumer is free to choose on the basis of objective principles, and that such success is not the result of heavy promotion or

Art Unit: 3677

advertising, shift in advertising, consumption by purchasers normally tied to applicant or assignee, or other business events extraneous to the merits of the claimed invention, etc," *In re Mageli et al.*, 176 USPQ 305 (CCPA 1973); *In re Noznick et al.*, 178 USPQ 43 (CCPA 1973). In the instant case, it appears that one of the inventors, Steve Karaga, is also the Executive Vice President of sales and marketing, Hitachi Power Tools (see attached NPL).

The weight attached to evidence of commercial success, etc. by the examiner will depend upon its relevance to the issue of obviousness and the amount and nature of the evidence. Note the great reliance apparently placed on this type of evidence by the Supreme Court in upholding the patent in *United States v. Adams*, 383 U.S. 39, 148 USPQ 479 (1966).

However, notwithstanding the opinions stated in either the Sofy declaration or the Covone declaration, there is no evidence that the sales of the embodiment containing the claimed invention were the direct result of any unique characteristics of the claimed invention and not due to other causes. See *In re Heldt*, 433 F.2d 808, 167 USPQ 676 (CCPA 1970). The statement in paragraph 6 of the Sofy declaration that the "overwhelming commercial success is believed to be a direct result of the hole/trough combination feature" is mere speculation absent supporting evidence. Furthermore, evidence of commercial success is not established merely by showing the number of articles or units sold. See *Kansas Jack, Inc. v. Kuhn*, 805 F.2d 1380, 219 USPQ 857 (Fed. Cir. 1983). Thus, we find no evidence in the record before us that the features recited in the claims on appeal were themselves responsible for the asserted commercial success.

We regard the subject matter here as clearly obvious over the prior art, and it is well established that, in such a case, commercial success cannot be persuasive of patentability. *In re Coey et al.*, 38 CCPA 1200, 190 F.2d 347, 90 USPQ 216. In addition, evidence of commercial

Art Unit: 3677

success is not controlling where, as here, the alleged invention seems to be clearly obvious in the sense of 35 U.S.C. 103. *In re Busch*, 45 CCPA 766, 251 F.2d 617, 116 USPQ 413, and cases there cited.

Moreover, even if, *arguendo*, Applicant's statement regarding the commercial success of the present invention *does* provide a convincing demonstration of patentability, MPEP § 2145 states:

**I. ARGUMENT DOES NOT REPLACE EVIDENCE WHERE EVIDENCE IS NECESSARY**

Attorney argument is not evidence unless it is an admission, in which case, an examiner may use the admission in making a rejection. See MPEP § 2129 and § 2144.03 for a discussion of admissions as prior art. The arguments of counsel cannot take the place of evidence in the record. *In re Schulze*, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965); *In re Geisler*, 116 F.3d 1465, 43 USPQ2d 1362 (Fed. Cir. 1997) ("An assertion of what seems to follow from common experience is just attorney argument and not the kind of factual evidence that is required to rebut a prima facie case of obviousness."). See MPEP § 716.01(c) for examples of attorney statements which are not evidence and which must be supported by an appropriate affidavit or declaration.

Further, MPEP § 716.01 states:

**ATTORNEY ARGUMENTS CANNOT TAKE THE PLACE OF EVIDENCE**

Examples of attorney statements which are not evidence and which must be supported by an appropriate affidavit or declaration include statements regarding unexpected results, commercial success, solution of a long-felt need, inoperability of the prior art, invention before the date of the reference, and allegations that the author(s) of the prior art derived the disclosed subject matter from the applicant. See MPEP § 2145 generally for case law pertinent to the consideration of applicant's rebuttal arguments.

***New Grounds of Rejection***

[8] Applicant's amendment to the claims filed on 5 July 2005 has necessitated the following supplemental new grounds of rejection

***Claim Rejections - 35 USC § 103***

[9] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

[10] Claims 1-18 and 21-26 (as they are understood) are rejected under 35 U.S.C. 103(a) as being unpatentable over Godsted et al. US-2001/0051080A1 in view of any one of: US-6,698,987 to Dicke, US-6,394,725 to Dicke, and US-4,655,661 to Brandt.

In short, Godstead et al. substantially teaches a screw (collated screws) to be driven by a hammer or pneumatic nail gun ("threaded nails" or "screws" claims 11 and 12, paragraph [0012] and paragraph [0024]), comprising: a head (18), an unthread section (22) between the head and a thread section (28), and a point section comprising a point (30).

However, Godstead et al. fail to expressly disclose a "pyramid" point (well known art-recognized equivalent of a cone point), a frustoconical head, and four nibs spaced 90° under the head

Dicke '987, Dicke '725, and Brandt '661, suggest a frustoconical head having four nibs spaced 90° under the head.

At the time of invention, it would have been obvious to one of ordinary skill in the art, to modify the heads of the coated collated screws taught by Godsted et al., by employing four nibs and a frustoconical surface as suggested by any one of Dicke '987, Dicke '725, and Brandt '661, in order to: 1) provide said screw heads with a better means for countersinking, 2) decrease



Art Unit: 3677

splintering of the substrate, 3) enable a better biting gripping surface, 4) provide a means for anti-rotation once the screws are driven into the substrate, or 5) better strengthen and reinforce said heads so as to be well-suited for hammer blows.

As for the size limitations of Claims 1, 5, 9, 11, 13, 17, and 22, it would have been obvious to one of ordinary skill in the art, to modify the dimensions of the fastener taught by Godstead et al. to perform ideally, because those of ordinary skill in the art would appreciate that a modification such as a mere change in size of a component would be obvious. A change in size is generally recognized as being within the level of ordinary skill in the art as a matter of design choice. *In re Rose*, 105 USPQ 237 (CCPA 1955). See also, MPEP § 2144.04 which states: *In re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976) ("mere scaling up of a prior art process capable of being scaled up, if such were the case, would not establish patentability in a claim to an old process so scaled." 531 F.2d at 1053, 189 USPQ at 148.). In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device. See, for example, US-5,927,035 to Haytayan col. 3 lns 27-30 which makes obvious, a tip angle of 35-37°, and a long pitch (herein, a design choice of 60-63°).

Furthermore, the abundant prior art of record suggests designing a screw intended for impact driving with "acute" flank angles and pitches which "may be such as to allow the spike or nail to be driven into the wood with a hammer...without breaking or forcing the [thread] from its

Art Unit: 3677

groove" as a matter of design choice. The input variables of *pitch* and *flank angle* have already been shown to provide expected results (that is, a decreased penetration force and ability to not crack the substrate or deform the threads). The examiner takes the position that the prior art of record (not used in a formal rejection), makes obvious the old and well-known design of flank angles and pitch of screws so that they are suitable for insertion into a substrate via hammer blow.

### ***Conclusion***

[11] Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

[12] Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Sharp whose telephone number is (571) 272-7074. The examiner can normally be reached 7:00 am - 5:30 pm Mon-Thurs.

Art Unit: 3677

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached on (571) 272-7075. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

#### NEW CENTRAL FAX NUMBER

Effective July 15, 2005

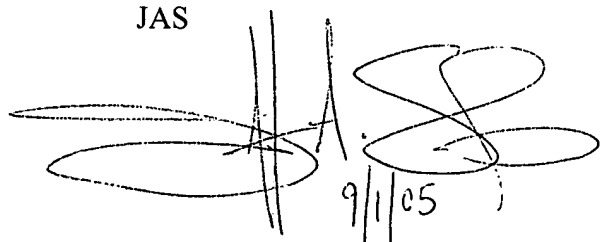
On July 15, 2005, the Central FAX Number will change to 571-273-8300. This new Central FAX Number is the result of relocating the Central FAX server to the Office's Alexandria, Virginia campus.

Most facsimile-transmitted patent application related correspondence is required to be sent to the Central FAX Number. To give customers time to adjust to the new Central FAX Number, faxes sent to the old number (703-872-9306) will be routed to the new number until September 15, 2005. After September 15, 2005, the old number will no longer be in service and 571-273-8300 will be the only facsimile number recognized for "centralized delivery".


**CENTRALIZED DELIVERY POLICY:** For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the Central FAX number, unless an exception applies. For example, if the examiner has rejected claims in a regular U.S. patent application, and the reply to the examiner's Office action is desired to be transmitted by facsimile rather than mailed, the reply must be sent to the Central FAX Number.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAS



9/1/05



ROBERT J. SANDY  
PRIMARY EXAMINER